

PLC-OSP- 12DC/300DC/ 1 - Solid-state relay module



2980827

<https://www.phoenixcontact.com/us/products/2980827>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



PLC-INTERFACE, integrated solid-state relay, with spring-cage connection, for mounting on NS 35/7,5 DIN rails, input: 12 V DC, output: 12 - 300 V DC/1 A

The figure shows the version PLC-OSC-24DC/300DC/1

Your advantages

- Wear-free switching with no contact bounce
- Resistant to vibrations and shocks
- Protective circuit in input and output
- Status indicator
- DC voltage outputs up to 300 V DC/1 A
- Option of bridging adjacent modules

Commercial data

Item number	2980827
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK6223
GTIN	4046356051552
Weight per piece (including packing)	31.39 g
Weight per piece (excluding packing)	31.39 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	With integrated solid-state relay
Operating mode	100% operating factor

Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	26.02.2026
------------------------------	------------

Electrical properties

Standards/regulations

Rated insulation voltage	300 V
Rated surge voltage	2.5 kV

Input data

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	9.6 V DC ... 14.4 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	6 mA
Typical response time	0.3 ms
Typical turn-off time	0.8 ms
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection; Varistor
Transmission frequency	50 Hz

Output data

Designation	Output data
Contact switching type	1 N/O contact
Design of digital output	electronic

PLC-OSP- 12DC/300DC/ 1 - Solid-state relay module



2980827

<https://www.phoenixcontact.com/us/products/2980827>

Output voltage range	12 V DC ... 300 V DC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Limiting continuous current	1 A (see derating curve)
Voltage drop at max. limiting continuous current	< 500 mV
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection; Varistor

Connection data

Input side

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross-section AWG	26 ... 14

Output side

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross-section AWG	26 ... 14

Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94 (Housing)	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Standards and regulations

Standards/regulations

Standards/regulations	IEC 60664
	EN 50178

Mounting

Assembly note	in rows with zero spacing
---------------	---------------------------

PLC-OSP- 12DC/300DC/ 1 - Solid-state relay module



2980827

<https://www.phoenixcontact.com/us/products/2980827>

Mounting position	any
-------------------	-----

Drawings

Diagram



① Input voltages 220 V DC/230 V AC

The figure shows the derating curve for PLC-...300DC/1

Circuit diagram



2980827

<https://www.phoenixcontact.com/us/products/2980827>

Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com